



PGCS PROJECT AND PROGRAM MANAGEMENT SYMPOSIUM
 • Better Management • Better Projects

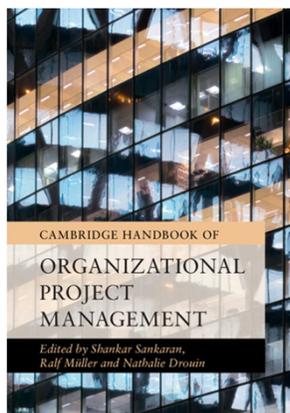
Symposium - 20-21 August 2019
 Top - Masterclass - Thursday 22 August

A Model for Organizational Project Management and its Validation

Shankar Sankaran - University of Technology Sydney, Australia
 Ralf Müller- BI Norwegian Business School, Oslo, Norway
 Nathalie Drouin – KHEOPS Research Centre, Montreal, Canada

BI NORWEGIAN BUSINESS SCHOOL | KHEOPS International Research Consortium on the Governance of Large Infrastructure Projects | UTS

OPM Book



Cambridge Handbook of Organizational Project Management (2017)

Editors

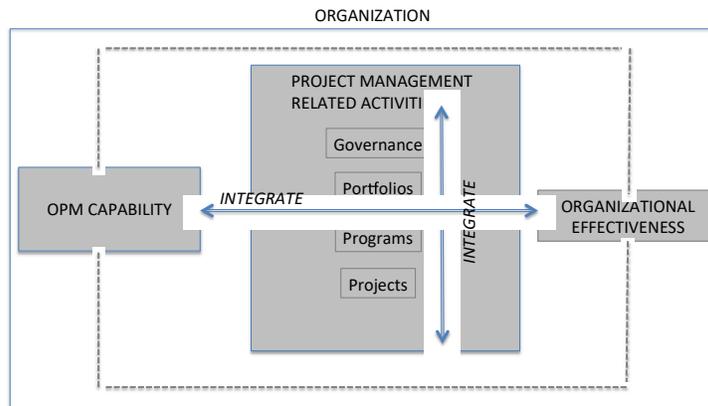
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What is OPM?

Nature and Role: OPM is *an integrative capability* to foster and perform *horizontal and vertical integration and coordination* of the *project management related activities*, using the organizational resources for the purpose of *achieving organizational effectiveness*



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OPM – Theory & Practice

OPM = the integration of all project related activities across the organizational hierarchy or network

Theory

- Discourse on OPM is mostly reduced to project, program, and portfolio management only
- Rarely attempts are made to integrate contemporary views, such as for projectification, multi-project strategies, governance paradigms, governmentality, etc.

Practice

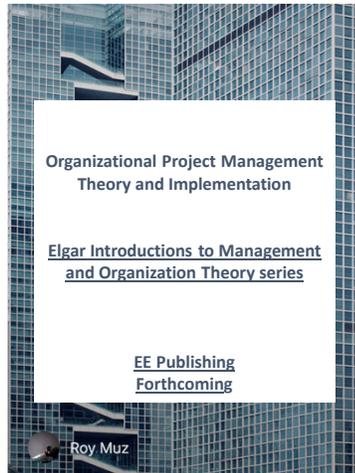
- No integrated understanding of OPM elements, and how to fine tune them for organizational efficiency
- Confusion about the anchoring of OPM elements in the organization
- No guideline for the design of OPM systems

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OPM Book



Organizational Project Management Theory and Implementation (forthcoming October 2019)

Elgar Introductions to Management and Organization Theory series

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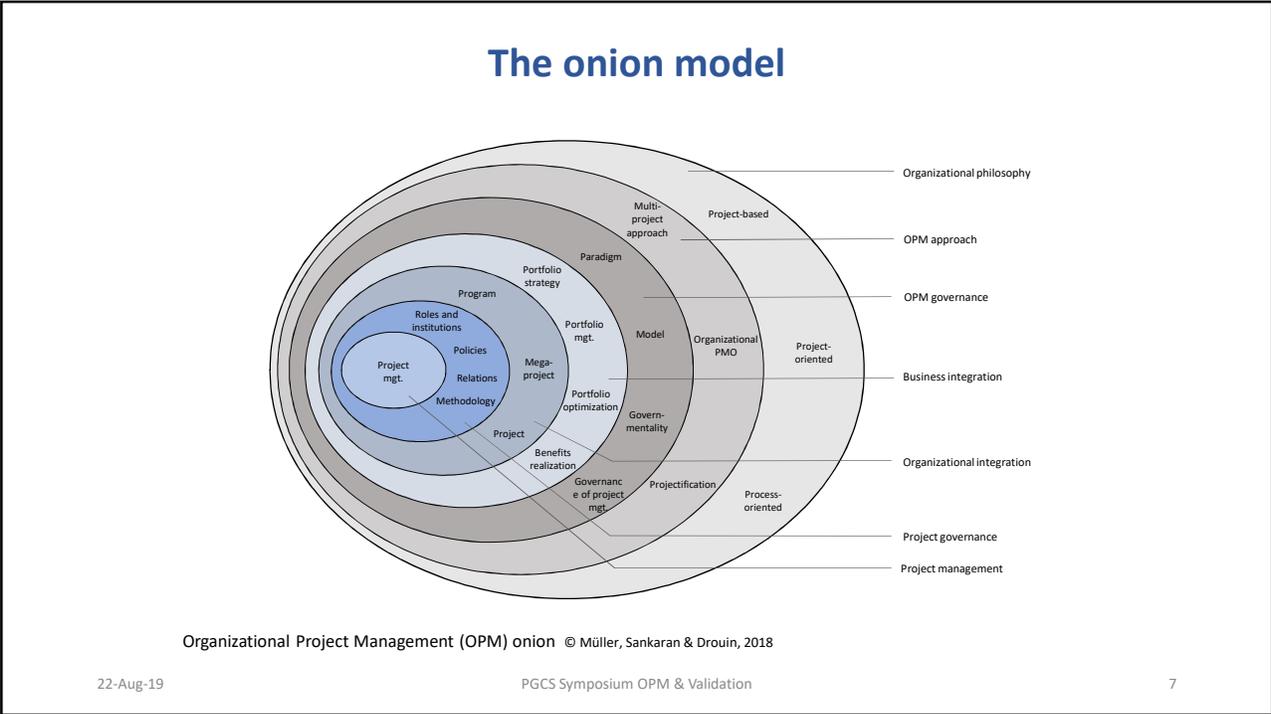
Development of an OPM Model

- A more integrative model for OPM
- For practitioners: Develop a method to design or adjust OPM designs contingent on an organization's circumstances
- For academics: Develop a model of yet isolated elements of OPM, allowing to further theorize on the role and functions of OPM

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Elements identified

| Element names | |
|----------------------------------|--------------------------------|
| Project-based organization | Portfolio management |
| Project-oriented organization | Portfolio optimization |
| Process-oriented organization | Benefits realization |
| Multi-project strategy | Program |
| Strategic/organizational PMO | Megaproject |
| Projectification | Project |
| Governance paradigm | Project management methodology |
| Governance model | Policy |
| Governmentality | Contracts |
| Governance of project management | Steering Group/Committee |
| Portfolio strategy | Project management |

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Organizational philosophy:**Process-oriented (functional) organizations**

- Typical for stable markets
- Typically structured by functional lines
- Work is done in permanent organizational entities
- Beneficial for mass-production of known products with known processes
- Key task is optimization of production system by reducing costs
- Economies are scale-based
- Projects are few and undertaken to optimize production

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Hobday, 2000

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Organizational philosophy: Project-oriented organizations

- Typical for dynamic markets
- Management decides to run the business by projects
- Use temporary organizations as a strategic choice for value delivery for clients (projects and programs are applied as temporary organizations)
- Project management quality is assured by a PMO
- Strategic alignment of the project portfolio is performed by a Project Portfolio Group, etc..

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Gareis & Huemann 2007

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Organizational philosophy: Project-based organizations

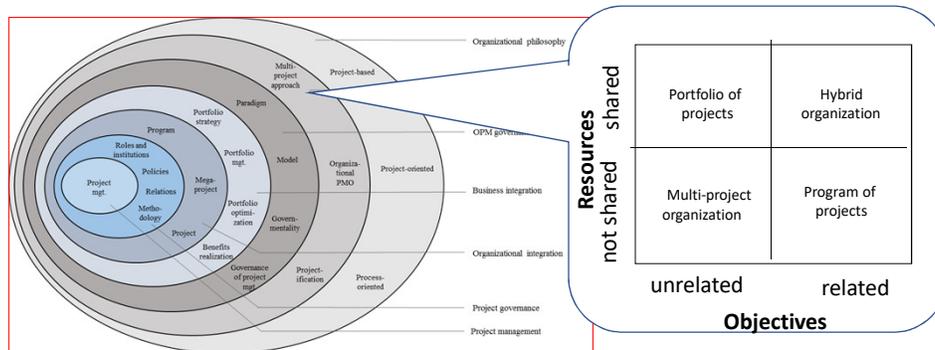
- PBO carries out contract projects for their external customers
- Project-based is bottom-up – the work that is done is required to be done through projects
- Project is the primary unit for production
- Requires specific monitoring and control systems per project

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OPM Approach: Multi-project



Multi-project strategy: Organizations accept any project they can get; resources not necessary shared; objectives not necessary aligned across projects.

Program strategy: Organizations prefer projects that contribute to higher level of objectives (program objectives); resources cannot be shared across projects;

Portfolio strategy: Organizations prefer projects that use their existing employees; resources are shared; project objectives might vary

Hybrid strategy: Organizations balance the program and portfolio strategies to maximize utilisation of resources and accomplish higher level of objectives

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OPM Approach: PMO types

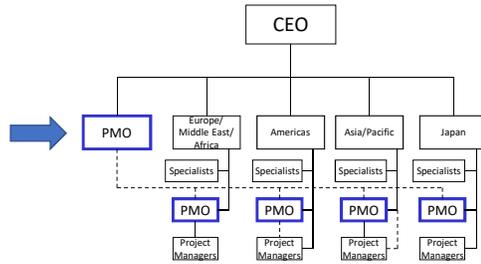
Tactical & Strategic PMO

Strategic PMO

Aim: improve project management effectiveness

Tasks:

- Methodology development
- Policy and standards
- Portfolio management
- Global reporting
- Building global project management culture



Tactical PMO

Aim: improve project management efficiency

Tasks:

- Training and support
- Audit and review
- Steering Committee
- Regional Reporting
- Building local project management culture

Müller 2009

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OPM Approach: Projectification

- Dimensions:
 - **The importance of project management** in the organization
 - **The existence of a career system** for project managers including training and certification programs for project managers
 - **Projects as the principle form of exchange** in business relationships
 - **A project mindset and culture by the employees:** when talking about their work, do employees refer to the projects they work in or the company they work for?

Midler, 1995; Müller, Zhai, Wang & Shao, 2016

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OPM Governance

Governmentality:
Authoritative: governors give clear direction
Liberal: governors use economic means to steer decision making
Neo-liberal: governors set value system to influence the self-governance of those they govern.

Governance paradigms
Conformist: shareholder orientation; strict behavior control of the project manager; keep project costs low
Flexible economist: shareholder orientation; control focus towards outcome; keep project costs low
Versatile Artist: stakeholder orientation; output control; focus on value creation;
Agile pragmatist: stakeholder orientation; control by process compliance; maximize the usability and business value of a project's product

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Validation

Empirical

- Predominantly qualitative (interviews)
- First parts of quantitative (questionnaire) assessment developed and in use
- Case study in the public sector in Australia
- Case study in a megaproject in Canada
- 14 organizations in the Netherlands
- 6 organizations in China
- All elements were validated
- Identified implementation patterns and their determinants

Theoretical

- Integration with Resource-Based Theory,
- Integration with institutional theory
- Integration with systems theory
- Development of a governance theory that describes the internal functioning of the model (within and between layers)
- An OPM assessment tool for use by academics and practitioners
- Guidelines for organizational design of OPM systems

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Assessment tools and early findings

| Layer | Element | Assessment model reference | Question/reference | Results |
|----------------------------|--|--|---|--|
| Organizational philosophy | Project-based Project-oriented Process-oriented | (Turner & Keegan, 2001) (Gareis & Huemann, 2007) Dto. | Discussion of characteristics | 3 organizations 3 organizations 8 organizations |
| OPM approach | Multi-project approach O-PMO Projectification | (Blomquist & Müller, 2006) (Müller et al., 2017) (Müller, Zhai, et al., 2017) | p.85-98 p. 54-58 p. 391 | 4 multi-project, 7 hybrid, 1 ptf, 1 pgm 5 organizations 6 low, 3 medium, 1 high |
| OPM governance | Paradigm Model Governmentality Governance of PM | (Müller & Lecoeuve, 2014) (Müller, 2009) (Müller, Zhai, et al., 2017) (Müller, 2009) | p.1346-1357 p.23-28 p. 391 p.31-40 | 7 artist, 3 economist, 2 conform, 2 agile 1 company specific, all Steering Group 6 liberal, 2 neo-lib, 2 authoritarian 4 step 1, 4 step 1 plus parts of 2 |
| Business integration | Portfolio strategy Portfolio management Portfolio optimization Benefits realization | (Kopmann et al., 2017) (Kopmann et al., 2017) (Cooper, Edgett & Kleinschmidt, 2004) (Bradley, 2014) | Discussion of characteristics | 9 link to strategy, 1 link to resources, 1 no All – decision by management team 2 cost reduction, 2 business value 6 some form of benefits management |
| Organizational integration | Program Megaproject Project | (Turner & Müller, 2003) (Bent Flyvbjerg, 2014) (Turner & Müller, 2003) | Discussion of characteristics | 8 programs 1 supplier for megaprojects All - projects |
| Project governance | Institutions and roles Policies Relations Methodology | (Müller et al., 2017) (Turner, 2004) (Müller, 2009) | Discussion of characteristics | All- Steering groups 2 emphasize adherence to policies 1 customer contract (re-measurement) 9 predictive (PRINCE2), 2 agile |
| Project management | Project-life-cycle Risk and change management | (Mantel, Meredith, Shafer, & Sutton, 2008) | Discussion of characteristics | Wide range from loosely to strictly managed |

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Findings

| Elements | Pattern 1 | Pattern 2 | Pattern 3 | Pattern 4 | Pattern 5 | Pattern 6 |
|------------------|------------|-----------|------------|-----------|------------|---------------|
| Philosophy | ProcOO (8) | | POO (6) | | PBO (6) | |
| Approach | Hybrid | | Hybrid | | Hybrid | Multi-project |
| OPMO | Yes | No | Yes | No | Yes | Yes |
| Projectification | Low | Low | Low | Medium | High | High |
| Paradigm | All | All | VA/AP | AP | All | VA/CON |
| Model | Yes | No | Yes | | Yes | No |
| Governmentality | All | All | All | All | All | Liberal |
| Gov of PM | Medium | Low | Medium | | Low/High | Med/High |
| Portfolio | High/Med | High/Med | Med/High | Low | High | High |
| Benefits | Low/Med | Low/Med | High | Low | High | Low |
| Org integration | Program | Program | Program | Program | Program | Project |
| Institutions | SG | | PMO/SG | SG | PMO/SG | PMO/SG |
| Methodology | Conv/Pred | Pred/none | Predictive | Emergent | Predictive | Pred/Conv |

- 8 of the organizations were ProcOOs,
- 6 companies were project-oriented (POO)
- 6 were project-based organizations (PBO).

- ProcOOs and POOs prefer hybrid approaches to steer their multi-project business
- PBOs prefer both hybrid and multi-project approaches with OPMOs
- 13 / 20 organizations (65%) use an OPMO for the governance of their multi-project business
- OPMO-driven organizations prefer a hybrid approach in governing their project business (62%)

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Findings

| Elements | Pattern 1 | Pattern 2 | Pattern 3 | Pattern 4 | Pattern 5 | Pattern 6 |
|------------------|-----------|-----------|------------|-----------|------------|---------------|
| Philosophy | ProcOO | | POO | | PBO | |
| Approach | Hybrid | | Hybrid | | Hybrid | Multi-project |
| OPMO | Yes | No | Yes | No | Yes | Yes |
| Projectification | Low | Low | Low | Medium | High | High |
| Paradigm | All | All | VA/AP | AP | All | VA/CON |
| Model | Yes | No | Yes | | Yes | No |
| Governmentality | All | All | All | All | All | Liberal |
| Gov of PM | Medium | Low | Medium | | Low/High | Med/High |
| Portfolio | High/Med | High/Med | Med/High | Low | High | High |
| Benefits | Low/Med | Low/Med | High | Low | High | Low |
| Org integration | Program | Program | Program | Program | Program | Project |
| Institutions | SG | | PMO/SG | SG | PMO/SG | PMO/SG |
| Methodology | Conv/Pred | Pred/none | Predictive | Emergent | Predictive | Pred/Conv |

- Projectification increases from pattern 1 to pattern 6
- Governance paradigms vary across the patterns;
 - ProcOOs use all of the four possible paradigms (Conformist; Flexible economist; Versatile artist; Agile pragmatist)
 - POOs prefer stakeholder-oriented paradigms
 - PBOs adjust the paradigms to the project settings
- Governance models appears to be associated with OPMO (except pattern 6)

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Findings

| Elements | Pattern 1 | Pattern 2 | Pattern 3 | Pattern 4 | Pattern 5 | Pattern 6 |
|------------------|-----------|-----------|------------|-----------|------------|---------------|
| Philosophy | ProcOO | | POO | | PBO | |
| Approach | Hybrid | | Hybrid | | Hybrid | Multi-project |
| OPMO | Yes | No | Yes | No | Yes | Yes |
| Projectification | Low | Low | Low | Medium | High | High |
| Paradigm | All | All | VA/AP | AP | All | VA/CON |
| Model | Yes | No | Yes | | Yes | No |
| Governmentality | All | All | All | All | All | Liberal |
| Gov of PM | Medium | Low | Medium | | Low/High | Med/High |
| Portfolio | High/Med | High/Med | Med/High | Low | High | High |
| Benefits | Low/Med | Low/Med | High | Low | High | Low |
| Org integration | Program | Program | Program | Program | Program | Project |
| Institutions | SG | | PMO/SG | SG | PMO/SG | PMO/SG |
| Methodology | Conv/Pred | Pred/none | Predictive | Emergent | Predictive | Pred/Conv |

- All three governmentality approaches – authoritarian, liberal and neoliberal are used (exception pattern 6 / liberal)
- Governance of Project Management increases from ProcOOs to PBOs (high in PBOs and vary in others)
- The use of benefits management varies, and seems to be higher in organizations with hybrid approaches and OPMO.

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Findings

| Elements | Pattern 1 | Pattern 2 | Pattern 3 | Pattern 4 | Pattern 5 | Pattern 6 |
|------------------|-----------|-----------|------------|-----------|------------|---------------|
| Philosophy | ProcOO | | POO | | PBO | |
| Approach | Hybrid | | Hybrid | | Hybrid | Multi-project |
| OPMO | Yes | No | Yes | No | Yes | Yes |
| Projectification | Low | Low | Low | Medium | High | High |
| Paradigm | All | All | VA/AP | AP | All | VA/CON |
| Model | Yes | No | Yes | | Yes | No |
| Governmentality | All | All | All | All | All | Liberal |
| Gov of PM | Medium | Low | Medium | | Low/High | Med/High |
| Portfolio (3) | High/Med | High/Med | Med/High | Low | High | High |
| Benefits | Low/Med | Low/Med | High | Low | High | Low |
| Org integration | Program | Program | Program | Program | Program | Project |
| Institutions | SG | | PMO/SG | SG | PMO/SG | PMO/SG |
| Methodology | Conv/Pred | Pred/none | Predictive | Emergent | Predictive | Pred/Conv |

- OI: ProcOOs and POOs prefer program approaches
- PBOs use both project and program approaches to implement their business opportunities
- Steering Groups are paramount as project governance institutions and complemented by PMOs in POOs and PBOs
- Project management methodologies vary across the organizations with predictive methodologies (such as PRINCE2) (Pred) being popular across the

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What Next?

- Case studies to find more patterns of OPM adoption from different sectors
- Review of literature on effect of technological disruption of Project Management affecting OPM
- Evaluate its impact on the current model and adjust model
- Develop a web-based diagnostics instrument for organizations to do a self-diagnosis
- Create a knowledge-base of OPM implementation to contribute further to theory and practice

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